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INVENTORY MANAGEMENT SYSTEM

Prepared by:

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Domain: <https://inventory.izgmsatmis.org>

List of Features

Home/Dashboard:

- Display statistics cards (Categories count, Tables count, Total Rows, Issuances count)
- Display line chart for issuances trend (last 7 days)
- Display bar chart for top recipients
- Display bar chart for largest tables (by rows)
- Display pie chart for tables per category
- Display categorized grid of all categories with table previews
- Click category card to view detailed category info with nested tables
- Quick navigation from category card directly to any table

Sidebar (Categories & Navigation):

- Create new categories
- Edit existing categories (with icon picker)
- Delete categories (requires password confirmation)
- Expand/collapse category to show its tables
- Context menu (right-click) on categories for quick actions
- View all users list (with pagination)
- View system activity log (with pagination)
- Home button to return to dashboard
- Issued Items button to view all issuance transactions

Main Table View (Spreadsheet Interface):

- Display table data with dynamic columns
- Inline cell editing for all column types
- Insert new rows with all column fields
- Delete rows (requires password confirmation)
- Search/filter rows across all columns
- Column management: add, edit, reorder, delete columns
- Column types: Text, Number (stock), Price, Date, Email, URL, Textarea, Dropdown, Checkbox, Image
- Stock visualization with status badges (Available/Low/Out)
- Row-level Issue button for quick issuance (if number columns exist)
- Table pagination (20 rows per page)
- Table actions toolbar: Insert Row, Add Column, Rename Table, Delete Table

Sidebar Bottom Panel (Right Side Panel):

- Users tab: List all system users with role badges
- Activity Log tab: Real-time activity feed with timestamps
- Click any user to view their personal activity log
- Pagination support for both tabs (20 items per page)

Issuance Module:

- Batch issuance from any table with number columns
- Autocomplete recipient names from history
- Select multiple inventory items across different rows/columns
- Filter issuance rows: All / Available / Partial
- Search/filter items by label or column name
- Real-time stock validation (cannot issue more than available)

- Issue date picker
- Optional notes field
- Stock deduction updates immediately in table
- Issuance history log with full details

Issuance Log (Full Page View):

- View all issuance transactions
- Filter by table (when opened from table context)
- Search by recipient name, table name, category, or notes
- Pagination (20 records per page)
- Click any issuance to view detailed breakdown:
 - Shows original row values before issuance
 - Shows quantities deducted per item
 - Shows remaining stock after issuance
 - Groups by row with all column details
- Shows total items issued and total quantity

User Profile Management:

- View/edit profile information (full name, email, bio)
- Change profile picture (upload or URL)
- Change password with current password verification
- Password strength indicator for new passwords
- Avatar color based on user role/random assignment

Authentication System:

- User registration with validation
- Login with username or email
- Password hashing (BCrypt)
- Role-based access (admin/user)
- Session management with logout

Category Management:

- Create/edit/delete categories
- Icon picker with Font Awesome icons (categorized: General, Office, IT/Tech, Inventory, Facilities, People)
- Icon search functionality
- Category detail modal shows all tables and a mini bar chart of rows per table

Row Data Management:

- Insert new rows via modal form (supports all column types)
- Image upload for image columns (drag & drop support)
- Image preview and download from cells
- Inline editing with automatic type-appropriate inputs
- Real-time cell updates via AJAX

System Security:

- Password confirmation required for destructive actions (delete category, delete table, delete column, delete row)
- SQL injection protection via prepared statements
- XSS protection via output escaping
- Session-based authentication

UI/UX Features:

- Toast notifications for all actions
- Responsive table with horizontal scroll
- Color-coded status badges
- Loading spinners for async operations
- Context menus for category actions
- User dropdown menu in topbar with profile access
- Topbar shows current logged-in user with avatar
- Search bar in table view with clear button
- Row highlight on search matches

Technical Architecture:

- Single-file PHP backend (home.php) with API endpoints
- MySQL database with foreign key constraints
- No external frontend frameworks (vanilla JS)
- Font Awesome 6 icons
- Custom CSS with CSS variables for theming
- Chart.js-free charts (pure Canvas API for simplicity)
- Drag & drop file uploads
- Autocomplete with keyboard navigation for recipient field
- Activity logging for all CRUD operations